From:

Susan Brown

To:

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Date: Subject:

Fwd: CalSTEP Feedback on the California Bioenergy Draft Report

Please docket these comments---06-BAP-1. Susan Brown

Susan J. Brown Fuels and Transportation Division California Energy Commission 1516 Ninth Street, M. S. #41 Sacramento, CA 95814-5512 Tel. (916) 654-4741

>>> Maurice Gunderson <mgunderson@nthpower.com> 03/17/06 3:28 PM >>> March 17, 2006

Ms. Susan Brown
California Energy Commission
1516 Ninth Street, MS-41
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Re: CalSTEP Feedback on the California Bioenergy Draft Report

Dear Ms. Brown:

At the March 9th Bioenergy Interagency workshop, the California Secure Transportation Energy Partnership, known as <sup>3</sup>CalSTEP (3), presented five recommendations on the draft report that was recently released by Navigant consulting. I participated in the CalSTEP process, and my firm Nth Power LLC and I heartily endorse the CalSTEP recommendations.

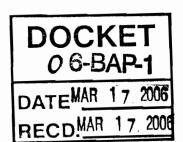
In addition, we would like to add one key issue to these recommendations. This issue was brought to the CalSTEP s attention after the five recommendations were made.

In its fourth recommendation, CalSTEP encouraged the state to provide mechanisms for aggressive E85 growth that parallels the state s Hydrogen Highway efforts. Yet since any high-blend ethanol effort that the state initiates would build upon a virtually non-existent presence of high blends in the state, CalSTEP encourages the state to build this E85 network while leaving the door open for more advanced transportation technologies, such as direct ethanol fuel cells, to emerge and be fueled by biofuels.

More specifically, CalSTEP recommends that the state:

- € Encourage ethanol to be denatured using substances like methanol and denatonium benzoate that, unlike gasoline, won t poison the catalysts in direct-ethanol fuel cells.
- € Examine ways to allow and encourage retailers to provide high concentrations of unblended denatured ethanol.

One example of such a scenario would allow for retailers to produce E85 for



today s <sup>3</sup>Flexible Fuel Vehicles (FFVs) by blending denatured ethanol with gasoline as it enters a vehicle s tank rather than splash blending it as it is delivered to fuel stations. Under such a scenario, ethanol could be immediately used in FFVs without having to make significant and costly modifications to the refueling infrastructure to allow possible vehicles of tomorrow to refuel as well.

Emerging technologies such as direct-ethanol fuel cells have the potential to provide a cost-effective, more efficient, and cleaner way of producing energy for vehicles and, therefore, their emergence should be encouraged. As California pursues an E85 network, Nth Power encourages the state to lay the groundwork for, or at least keep the door open to, the emergence of advanced transportation technologies that work in combination with biofuels, thereby positioning the network to meet the needs of today s and tomorrow s vehicles.

Please do not hesitate to call if I can provide further information on this topic. Thank you for your diligent work on this very important matter for the future of California.

Sincerely,

Maurice E. P. Gunderson, PE Nth Power LLC

Cc:

Mike Smith, The California Energy Commission Matt Peak, CalSTEP Project Manager, CALSTART Rodrigo Prudencio, Nth Power LLC

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